CONDITION ASSESSMENT OF THE

CARTER TOMBS

PREPARED FOR THE

Foundation for Historic Christ Church

IRVINGTON, VA

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Preserving the substance and significance of gravestones

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1. Introduction

1.1 MCC was contacted for a proposal for a condition assessment of the Carter tombs, at Christ Church, Irvington (Lancaster Co.), VA. Based upon several telephone conversations, MCC prepared a proposal letter on October 10, 2001, outlining a fairly straight-forward scope of work. It was our intent to carry out a conditions survey, undertake limited laboratory testing (as necessary), and prepare recommendations for conservation treatment.

Our initial visit to Christ Church was on August 8, 2002. We examined and photographed the three Carter tombs, and had an opportunity to review (briefly) the archive of historic photographs of the tombs, along with some additional images in the museum displays. (MCC's consultant, Weiss, recalled at that point that he had visited the site in the late 1970's.)

Robert Carter, north and east elevations, August 8, 2002

Our thoughts on August 8 are perhaps best summarized by the opening paragraph of our revised proposal (31 August 2002):

> *…Seeing first-hand the complicated history and (present) condition of the tombs has significantly changed our thinking. By the time we left the site that afternoon, it was apparent that a new approach to their conservation is necessary.*

The disturbing state of the tomb lids (now displayed indoors) was, for us, a powerful argument in favor of defining a cautious, conservation-oriented program for the tombs themselves.

Our revised proposal expanded and re-organized the scope of work, defining two phases. Phase I, summarized in this report, is the development of a strategic conservation plan, starting with the documentation of the physical history of the Carter tombs, and of their present condition. The plan is presented as an overall strategy for each tomb, based upon element-by-element documentation of condition. (Phase II, still to be done, will be materials-and-methods recommendations for the work.)

The field work commenced on November 4 with an initial inspection of each elevation, and some additional digital photographs were taken. Biological soiling, a common condition in warm, moist climates, can make it difficult to characterize construction materials and to record their condition. The tombs were therefore cleaned with D/2 Architectural Antimicrobial (Cathedral Stone Products, Inc., Hanover, MD 21076). The product was applied with hand-held pump sprayers, and allowed to remain on the surface for several minutes. It was then manually scrubbed with wet brushes, and finally rinsed with a small pressure washer.

Removal of biological soiling to facilitate inspection, November 4, 2002

A more detailed examination was undertaken on November 5, after the tombs were dry. We first recorded a set of key measurements to improve the elevation drawings and to define the position of each tomb with respect to the church. A set of digital photographs of the cleaned tombs was then taken to duplicate, as closely as possible, the historic ones. The primary work of the stone-by-stone survey involved documenting the (apparent) survival of early historic fabric and recording the location, type and severity of damage and/or materials degradation.

3. Materials/Conditions Survey

The following portion of this report, presented for each tomb, is intended to be read in conjunction with the annotated drawings. Both written and graphic documentation of materials and conditions are derived from our field notes (recorded November 4-5, 2002). The text is organized on an element-by-element basis, i.e., panels, corners and base moldings are described separately.

For panels and corners, an attempt has been made to define these elements (or assembled fragments or cast replicas) as:

a) pre-dating the 1927 restoration;

b) of 1927; or

c) of a later period.

In this regard, some of the reliably dated photographs in the Foundation's archives have been valuable; a number of specific examples have already been noted in section 2., above.

There are at least four different stones in the three Carter tombs. They seem to be:

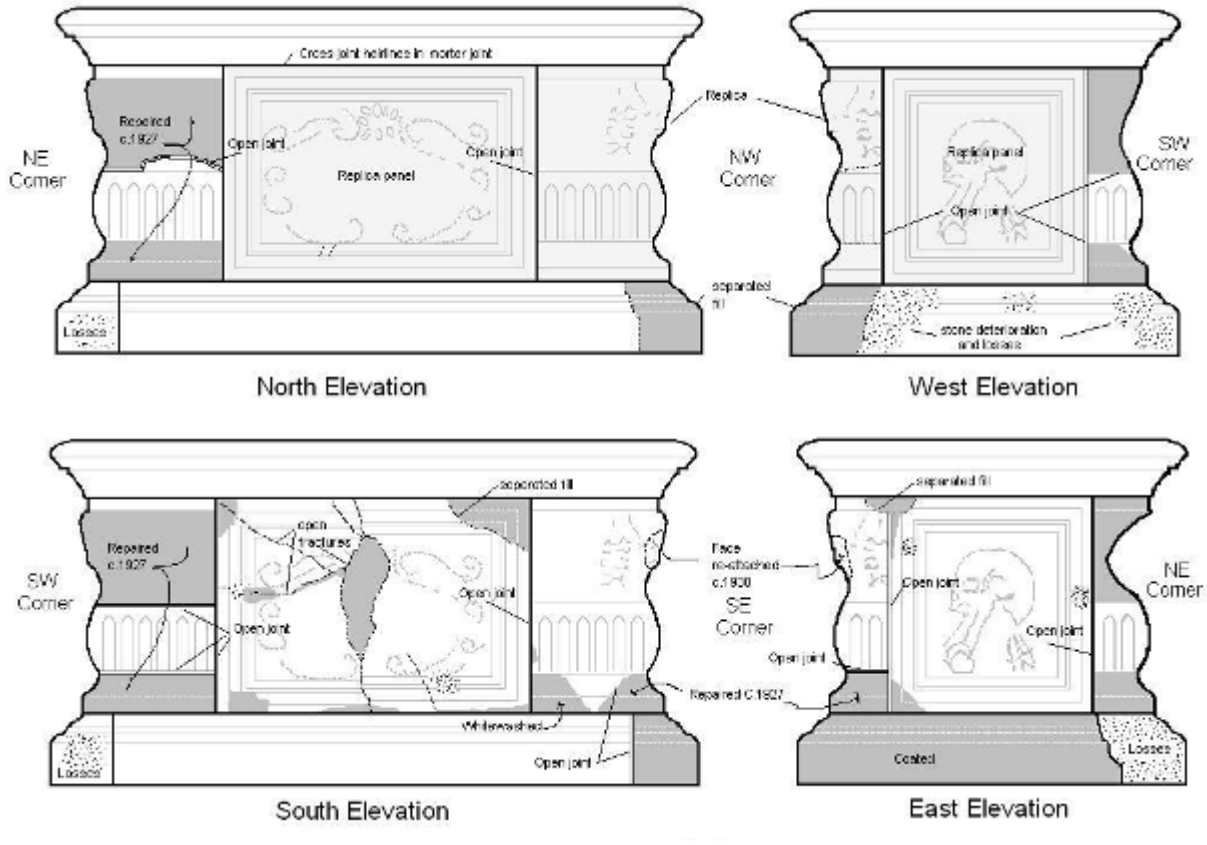
1) compact, lightly veined white marble, probably from Carrara (near Massa), in northwestern Tuscany;

2) marble with blue-gray "spider" veining, possibly a stone that is today called "bianco venato gioia," also from Carrara;

3) Portland stone, an upper Jurassic limestone largely quarried on the Isles of Portland and Purbeck (Dorset), off the south coast of England; and

4) a more distinctly oolitic limestone, possibly one of the middle Jurassic Lincolnshire limestones.

All materials described as "fills" appear to be cement-based, as are the cast replicas.



3.1 Robert Carter

Panels:

North (long), cast cementitious replica (but not identical to south panel), 1927. Open vertical mortar joint at right edge, and cross-joint hairline fractures in horizontal mortar joint along upper edge.

South (long), white marble, pre-1927. Prominent fractures and fills, with fragments poorly fit, as seen in 1927 photograph (#0005). 1927 fills have weathered, discolored and separated; some fractures are open. Two small areas of active surface deterioration. Open vertical mortar joints at left and right edges.

East (short), white marble, pre-1927. Small losses at upper and lower left; a patch at upper left is separated. Two small areas of surface deterioration; open vertical mortar joint along right edge. Large gap along upper half of left edge.

West (short), cast cementitious replica, 1927. Open vertical mortar joints at left and right edges.

Corners:

NW, cast cementitious replica of SE corner, 1927 (no head). Of generally poor quality. Open vertical mortar joints on north and west elevations.

NE, fluted fragment is white marble, pre-1927 (see photograph "A"); remainder (above and below) is simplified cementitious fill. Upper fill separated from the marble along its lower edge. Open vertical joint on east elevation.

SE, white marble (more fine-grained than south or east panels), pre-1927. Incomplete head in 1927 (#0004 and 0005) photographs, although tomb lid is already in place. (Whiter) marble face (except for proper left eye) apparently attached 1938-63. Adhesive residue around face. Fills along lower edge, whitewashed, with separations from marble. Open vertical mortar joint on south elevation. Large gap (and separated fill) at upper corner on east elevation.

SW, fluted fragment is white marble, pre-1927 (see photograph #0005); remainder (above and below) is simplified fill. Both fills are separated from the marble. Open vertical mortar joints on south and west elevations.

3.1 Robert Carter (contunued)

Base moldings:
North, Portland limestone. Deterioration, with considerable loss at east end. Detached fill at west end.

South, Portland limestone. Deterioration, with considerable loss at west end. Fill at east end with open vertical mortar joint.

East, Portland limestone. Deterioration, with considerable loss at north end. Most is fill, with some whitewash.

West, Portland limestone. Deterioration, with extensive loss. Detached fill at north end.

Robert Carter, east elevation, November 5, 2002, showing deterioration of base molding

Robert Carter, west elevation, November 5, 2002, replica panel

Robert Carter, north and west elevations, November 5, 2002, panel and NW corner are replicas

Robert Carter, south elevation, November 5, 2002; note mis-alignment of panel fragments probably assembled in 1927

4. Conservation Strategies

4.1 Despite the remarkable state of disarray seen in the pre-1927 photographs, our approach to the development of a conservation strategy for the Carter tombs--as we find them today--makes two assumptions. The first is that the platforms have never been moved, i.e., that the tombs are in their proper positions. Although a June 1927 article cited by Neblett (p. 40) discusses "excavating to find a firm foundation for the tomb of 'King' Carter…," it would have been exceptionally difficult to have lifted the platform stones. Moreover, had this been done, it is likely that they would have been straightened to parallel the east end wall of the church.

Our second assumption is that the surviving elements were probably re-assembled correctly in 1927. Each tomb has at least one long panel, one short panel and one corner pre-dating 1927, and matching each other (for each tomb) in height. These vertical dimensions are slightly different from tomb to tomb, and there is no obvious evidence of alteration to permit reconstruction. (For Judith, this seems to be confirmed by the presence of original mason's numerals on the upper surfaces of the NE corner and east panel, as seen in photographs #0077 and 0078, taken in 1980).

#0077 and #0078, Judith Carter, lid removed, August, 1980

Each combination of elements then defines the perimeter dimensions of the upper portion of each tomb, and there is similarly no obvious evidence of a mis-fit of any tomb to its platform. The more specific positioning of elements that are interchangeable (e.g., north and south panels) seems to have been based upon visibility to the public. Both Robert and Judith have a replica short panel; each is on the west elevation. The long replica panel of Robert is on the north elevation, somewhat hidden; for Judith, the large replica was placed on the south elevation, with (it would seem) the same logic.

The conservation of cultural artifacts is a complex task. It requires making difficult choices, especially if the artifacts are particularly old, and of great historical value. In museums, most conservation decisions are dictated by aesthetics. For artifacts displayed outdoors (such as building exteriors, or public sculpture), the conservation team--conservator, contractor and client --must add functionality to the equation, performing certain tasks to combat the effects of weathering, or to make the object mechanically stable.

For funerary monuments (and archaeological ruins), the aesthetic issue is particularly intricate. Poets and painters in the second half of the 18th century began depicting cemeteries in a romantic manner, relating the decay of stone and the collapse of tombs to broader concepts of mortality. The rural cemetery movement, starting in the 1830's, served to strengthen this link.

In some situations, the aesthetic and the functional may be in opposition. The development of a practical, successful conservation strategy has always involved finding a point of balance between the two. Currently this process is guided by an emphasis on the importance of original elements or fragments, on the re-treatability of the conserved "fabric," and on the presentation of new materials in a way that does not confuse future generations.

Conservation options for the Carter tombs fall into two broad categories: preservation and restoration. "Preservation" means retaining them in an as-found condition, taking action only to prevent continued deterioration in the future. Were the tombs in good physical condition today, "preservation" might consist of "doing nothing". Because of open joints, failed repairs and some active stone decay, "doing nothing" is simply not the route to their "preservation." The more prudent course of action could include re-pointing, crack filling, minor patching (associated with the removal of failed repairs), and chemical treatment (to strengthen and/or resist environmental acidity). Thus, the challenges of "preservation" are largely technological in nature.

"Restoration" means a re-creation of historic appearance, accomplished through the addition of missing features or elements, or the removal and replacement of aesthetically unsatisfactory repairs. Here the challenges lie in the realm of craft skill, although there is the interesting philosophical question of whether portions of the 1927 work (such as some of the cast replicas), now three-quarters of a century old, are worthy of "preservation," rather than obliteration in the name of "restoration." The latter could include the removal of all cementitious fills, artistic patching (worked in place, or done with partial casts or stone dutchmen), and the installation of replacement units (casts or carved stone).

Much as we have defined the notion of "doing nothing" as an unreliable "preservation" approach, we must comment that a total "restoration" of the Carter tombs--repairing every minor flaw--would create an unreasonably "brand new" appearance. This would also be the case if complete replication of the tombs were to be done, with the additional interpretive problem that no historic "fabric" would then been seen on site.

From a practical standpoint, some operations--such as cleaning--are difficult to categorize. Is cleaning "preservation" because it removes biological growth that can harm the historic "fabric," or is it "restoration" because it brings back an earlier appearance? In fact, it is often an essential component of both, and points to the need to combine conservation attitudes, in an attempt to achieve a final product that is both visually and historically satisfactory.

Finally, there is the question of whether to accomplish the work in place, or to disassemble the tombs, conserve and re-build. The photographic documentation of the work done in 1980 in conjunction with the replacement of the lids (e.g., #0065) shows the extent to which the individual elements have been attached to back-up brickwork and to each other. This argues strongly against disassembly, which could cause serious damage to weakened, historic stone.

#0065, Betty Carter, lid removed, August, 1980

4.2 All three tombs require additional cleaning and the re-pointing of all mortar joints. The platforms, on which the tombs rest, will require some minor repairs, and the re-pointing of the bed joint beneath the base moldings. (The Robert Carter tomb has an additional bed joint between the two levels of the platform.) Platform head joints should probably be left open to permit drainage of surface water directly into the soil.

Open mortar joint (typical), November 5, 2002

Platform, Robert Carter, south elevation, November 5, 2002

Tomb-by-tomb recommendations are given in sections 4.2.1 through 4.2.3, below. Information is provided in the form of annotated drawings, which identify specific locations and work items. Materials and methods for each conservation process will be defined in detail in our Phase II report.

In general, old fills are designated for removal and replacement, although there is one large area of base molding on the north elevation of Judith that is in satisfactory condition, and can remain. (Crack filling, a related operation, will require different materials.) All cast replicas appear to be sound, and should be retained; they are to be re-colored to match the appearance of their cleaned (stone) counterparts. At this time, our recommendation is that chemical treatment be limited to particular areas of deterioration on Robert, and the panels of Betty. New stone, either as dutchmen or full (joint-to-joint) replacement units, is only designated for use in some areas of the base moldings.

4.2.1 Robert Carter

There are two stone panels (south and east), and two cast replicas. The south panel is in poor condition. It will require the removal and replacement of old fills, crack filling, and localized chemical treatment. Anticipated visual improvement for the south panel, which is particularly prominent, is considerable. Much less work is required for the east panel.

One (SE) corner is essentially complete; two survive only as single fragments, and one (NW) is a cast replica. The majority of work on these elements will be the removal and replacement of the large fills on the SW and NE corners, which will result in a significant visual improvement. All surviving marble of the corners, although mechanically damaged, is in sound condition.

The east and west base moldings are in poor condition. They require (either) extensive chemical treatment and filling (especially to re-establish profiles in the area beneath the NE corner), or the installation of replacement elements of new stone.

Overall condition of the Robert Carter tomb is poor.